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ABSTRACT

A pamphlet, "AIDS and You," was designed for use with high school special education students. The pamphlet discusses the progression of the disease, prevention methods, and a series of scenarios reflective of teenagers' dilemmas. The scenarios are intended to serve as a basis for class discussion or for use by parents for values clarification at home. The pamphlet has a readability level of grade 3.8 and contains a vocabulary preview of words readers must know and self-assessment questions. The pamphlet was evaluated with 100 special education students in three rural and two urban Kentucky high schools. The sample was made up of 71 males and 29 females. Students read either the AIDS pamphlet or a pamphlet on chewing tobacco, and completed a pretest and posttest on AIDS knowledge. For the treatment group as a whole, the AIDS pamphlet did not increase knowledge of AIDS. Girls in the treatment group showed a significant reduction in AIDS knowledge at posttest, possibly due to students' negative attitudes about task repetition or immediate post-pamphlet anxiety based on the nature of the subject matter. There were no differential effects by special education classification. (SV)

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ACRES PRESENTATION
Presenter: Janice L. Ferguson
Co-Presenter: Thomas Nicholson
Frank Kersting
Day: March 19, 1991
Time: 1:30pm - 2:30pm

Experimental Evaluation of "AIDS and You": A Pamphlet for High School Special Education Students

RC018490

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EXPERIMENTAL EVALUATION OF 'AIDS and You':
A PAMPHLET FOR HIGH SCHOOL SPECIAL EDUCATION STUDENTS

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EXPERIMENTAL EVALUATION OF 'AIDS and You':
A PAMPHLET FOR HIGH SCHOOL SPECIAL EDUCATION STUDENTS

ABSTRACT

Health education of the public is an increasing concern particularly in the area of sexually transmitted diseases (STDS). Currently, pamphlets are written at or above the seventh grade level of readability while not all segments of society read at that level. Criteria exist for making pamphlets more readable so that those reading at lower levels can understand the material. A healthy society needs informed citizens and pamphlets written for specific segments of society are a critical contribution to achieving that goal.

EXPERIMENTAL EVALUATION OF 'AIDS and You':
A PAMPHLET FOR HIGH SCHOOL SPECIAL EDUCATION STUDENTS

INTRODUCTION

Health education regarding sexually transmitted diseases (STDS) is the focus of public attention as society moves from debate to action. One such action is the attempt to educate all segments of society about STDS, particularly AIDS (Acquired Immune Deficiency Syndrome). Professionals in sex education, sexual dysfunction, and sexually transmitted diseases, report that effective communication is a key element in both prevention and treatment programs (Merson, 1987). One effective medium for transmission of information is health pamphlets as they provide factual information that can be readily referred to unlike other mediums such as television.

PURPOSE

The purpose of this study was to measure information gained by urban/rural secondary special education students after reading a specially designed pamphlet on AIDS. The authors hypothesized that health pamphlets, while designed to be as explicit as possible, were not written at a functional literacy level for unique populations such as secondary special education students. The authors' initial research of ten pamphlets revealed reading levels ranging from seventh to tenth grade with one exception of a high fifth grade level (Ferguson & Kersting, 1989). The functional reading level of the general American public is approximately fifth grade and lower for certain segments of the population (Resnick & Resnick, 1977). Pamphlets written at the seventh grade level may be appropriate for the educated segment of society. For those with restricted reading ability there are currently no pamphlets available. The adult population reading at a functional literacy level is an at-risk population in health. Consequently, they need information they can understand.

PAMPHLET DESIGN

The authors designed the pamphlet, 'AIDS and You' for use with high school special education students. The pamphlet, which has had two revisions to accommodate new information about AIDS, contains a vocabulary preview of words readers need to know, self-assessment questions, and has a readability level of 3.8 grade (Flesch scale).

'AIDS and You" clearly traces the progression of the disease, explaining not only what happens once the person becomes HIV positive

but his ability to infect others. The facts are presented in a parental discussion format of "Let's talk about . . ." Prevention and early diagnosis are stressed, reflecting the prevailing public health position. Prevention methods clearly reflect the current national position that the only "safer sex" is no sex, emphasizing alternate ways of showing affection. The other primary route of transmission, injecting drugs, is explained with the admonition that drugs must always be avoided. The values are presented at the end of the pamphlet through a series of "situations" reflective of teenagers' dilemmas. These scenarios are intended to serve as a basis for class discussion or for use by parents for values clarification at home. The pamphlet was rated by a national panel as appropriate for high school and college students because of interest and format (CEC/AAHE, 1989).

PILOT STUDY

The authors tested the pamphlet against a commercially available pamphlet for AIDS with the special education students enrolled in grades 9 through 12 in a Kentucky high school. The pilot study results suggested the viability of using health pamphlets written to the reading level of the targeted audience, secondary special education students (Ferguson, Kersting, & Nicholson, 1990). The current study was expanded to a more cross-sectional population of urban/rural secondary special education students. The identified "urban" areas were two Lexington, Kentucky sites. The rural areas were three high schools in East and West Central Kentucky.

URBAN/RURAL STUDY

A study sample was comprised of 100 special education students at three rural Kentucky high schools and two urban Kentucky alternate treatment centers. The sample included 71 males and 29 females. Twenty-four of the students were black and 76 were white.

The sample represented a mix of demographic characteristics, urban/rural, handicapping condition, race and gender. The Solomon-Four Group research design was employed within each school and class. Two groups read the 'AIDS and You' pamphlet while two groups read an age/interest appropriate pamphlet on a different health concern, chewing tobacco.

An author-designed AIDS knowledge test consisting of 30 multiple choice items developed specifically to measure information presented in the 'AIDS and You' pamphlet was administered. Test-retest reliability is .69 (n=30) and internal consistency reliability (KR-20) is .89 (n=44). The results of the study are as follows.

1. Analysis of covariance (ANCOVA) revealed no difference in post-test scores between the treatment group (GR. 1) and the control group (Gr.3) ($F_{1,49=}.08$, dF = 49, $p<.7729$).

2. ANCOVA revealed a significant difference in posttest scores between girls in the treatment group (GR. 1) and girls in the control group (GR. 3) using the pretest as a covariate ($F_{1,12}$=6.98, dF = 12, p<.0246). The pretest mean score of the treatment group was 21.83, at posttest it was 16.17 (T = -2.75, p<.0403). This represents an 18.9% reduction in knowledge.

3. Analysis of variance revealed no difference between the posttest mean of the pretest/posttest treatment group and the posttest mean of the posttest only treatment group (F = .21; 3, 99; ns).

4. No difference was found between the posttest means of the typically impaired treatment students versus the typically impaired control students using the pretest as a covariate (ANCOVA), ($F_{1,22}$ = dF = 22, p<.6137. ANCOVA revealed no significant difference between the posttest mean of the severely impaired control students ($F_{1,26}$ = .09, dF = 26, p<.7679).

5. No difference was found between the posttest means of the educably mentally handicapped treatment students versus the educably mentally handicapped control students using the pretest as a covariate (ANCOVA), ($F_{1,22}$ = ,41, dF = 22, p<.5312). ANCOVA revealed no significant difference between the posttest means of the learning disabled treatment students versus the posttest mean of the learning disabled control students ($F_{1,3}$ = 1.5, dF = 3, p<.4360).

The results of this experimental evaluation are mixed and unclear. The lack of an overall treatment effect coupled with an apparent loss of knowledge among females is disappointing. The authors have three hypotheses that may explain the results found.

1. Students' negative attitudes about task repetition (i.e., students completed the pretest at the start of the class session and completed the posttest at the end of the same class session).

2. Immediate post-pamphlet anxiety based on the nature of the subject matter.

3. Combination of 1 and 2.

Based on the reported findings the following conclusions were drawn.

1. For the treatment group as a whole, the pamphlet was not proven to increase knowledge of AIDS.

2. There was a significant reduction in knowledge among girls only; no change in knowledge was found among boys.

3. No testing effect occurred.

4. No differential effects were found by severity of special education classification.

5. No differential effects were found between the educably mentally handicapped and the learning disabled impaired students.

RESULTS/CONCLUSIONS

Due to the mixed and unclear findings of the urban/rural study, the authors have defined a new study to determine (1) why there was a negative reaction among girls to the AIDS brochure and (2) why there was no overall effect.

The recently-funded new study utilizes the 45 educably mentally handicapped/learning disabled students enrolled in Resource English in a local Kentucky high school and the 60 students identified as learning disabled/emotionally disturbed at a residential psychiatric facility in a small Kentucky community. Neither of these sites participated in the earlier urban/rural Kentucky study.

The authors hypothesize that the results happened either (1) because the students were irritated they had to take the same test twice in one period, consequently, they did not take the posttest seriously and (2) anxiety created by the nature of the topic of AIDS decreased performance. The study was redesigned to test these two hypotheses.

A pretest/posttest alternative treatment group will be utilized. Using random selection, one half of the classes will receive both the pamphlet and a 40 minute tutorial on AIDS. One half of the classes will receive only the pamphlet but be given 20 minutes to read it. The entire study will be conducted over the course of three weeks. Week one will consist of the AIDS pretest. Week two will consist of the pamphlet/tutorial for Group 1 and the pamphlet for Group 2. Week three will consist of the posttest. Altogether, only three class periods will be utilized. The classrooms will be randomly assigned to the two treatment conditions.

Results of the new study will be presented at a later conference.

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